

*Rauch (J. H.)*

ADDRESS

DELIVERED BEFORE THE

NEW ORLEANS

AUXILIARY

SANITARY ASSOCIATION,

— BY —

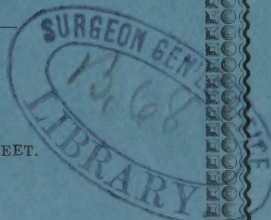
JOHN H. RAUCH, M. D.

PRESIDENT ILLINOIS BOARD OF HEALTH.

NEW ORLEANS:

A. H. NELSON, STEAM PRINT, 57 CAMP STREET.

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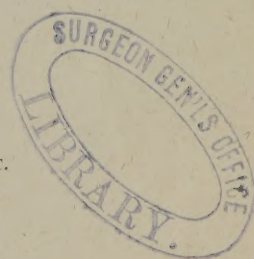
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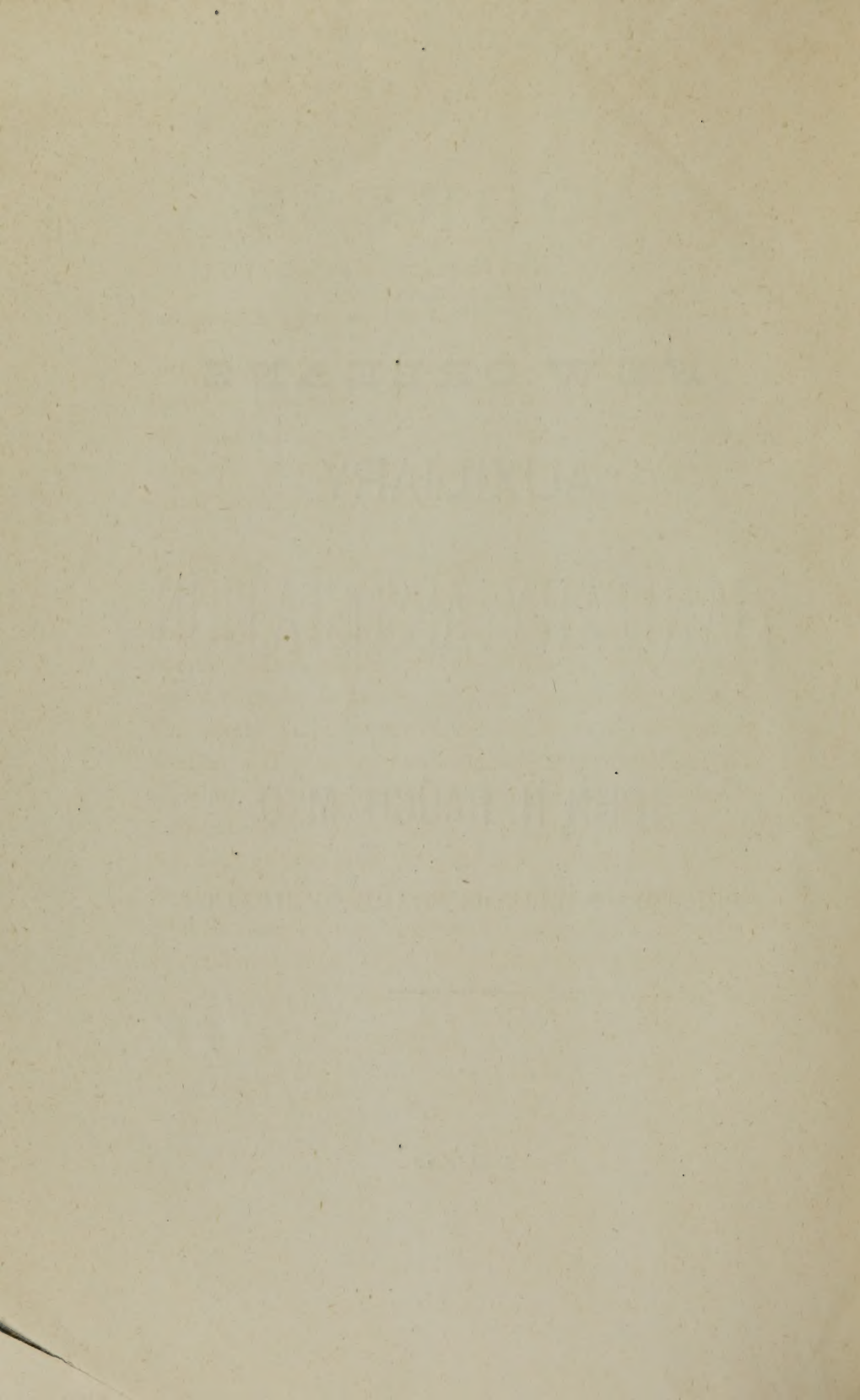
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NEW ORLEANS, MAY 10th, 1879.

*Office, New Orleans, Auxiliary Sanitary Association.*

At a meeting of the Executive Committee of this Association held April 26th, 1879, a discussion occurred upon the propriety and necessity of the immediate discontinuance of all interments in the heart of the city, and of the permanent closure against burials of all intramural cemeteries.

At this meeting Dr. John H. Rauch, of the Illinois State Board of Health was present.

Gen. Bussey, President of Committee, having been informed of the special study Dr. Rauch had bestowed upon this subject and his large practical experience, requested him to favor the committee with his views and the results of his personal observation. The address proved of marked interest to those present. Permission was obtained to publish the remarks and at the meeting of the committee on May 3rd, it was unanimously resolved, that the address contains much interesting and important information, not easily accessible, and that it be printed for the instruction and benefit of the members of this Association and citizens generally.

C. B. WHITE. M. D.

Sanitary Director.



*Mr. President and Gentlemen of the Association :*

Before speaking directly to the subject, I would say that I am much interested and pleased as far as I have seen, with the plan and work of your organization. It promises well for the sanitary future of your city, provided, your efforts are not intermittent but continuous, and I sincerely hope your organization will be permanent.

With regard to the burial of the dead in populous cities and towns, my attention was called to its effect upon life in July, 1850, in Burlington, Iowa, during the prevalence of cholera; no deaths had occurred in the neighborhood of the cemetery, until about twenty had been buried there. After this, until the epidemic ceased, cases occurred and always in the direction from the cemetery, in which the wind blew. I called attention to this fact; and two years later, the cemetery was abolished by act of Congress and the ground devoted to educational purposes. Afterwards being called to Chicago to fill a professorship in Rush Medical College, I incidentally mentioned the facts as before stated, my attention was called to the cemeteries in the northern portion of that city with the request at the same time, that I prepare a paper upon the same subject.

After a careful study of the subject, reasoning from a purely chemical, physiographical and philosophical stand point, I felt fully warranted in making the assertion that the emanations from human remains, frequently result in diseases, increase the ravages of epidemics, in many instances act as exciting causes of them, and shorten life. This paper was written in 1859, and read by request before the Chicago Historical Society, an Association composed (like your own), of the most prominent and influential gentlemen of that city. This explanation seems desirable, as the question might be asked, why it was not read before the Medical Society? In the course of my study upon the subject, one of the strongest argu-

ments in support of the opinions already expressed with regard to the injurious effect of this custom upon life, I found in a report of the Sanitary Commission on the epidemic Yellow Fevers of 1853, published by authority of the City Council of New Orleans, by Dr. E. H. Barton.

"In looking over the sanitary map accompanying this report, we find that the Fourth District suffered most severely, in fact, more than double that of any other District, the mortality being at the rate of 452 per 1,000 of the population. In this district exist three extensive cemeteries, in which were buried last year nearly three thousand bodies. It was in one of these, that the offensive exposure of bodies occurred, so painful to the public. In the first ward of this district was a series of low, crowded, and filthy pest-houses, inhabited by the lowest class of people.

The proportion of deaths here was 542 per 1,000.—The next in mortality was the Third, containing all the cemeteries, and most of the vacheries, The proportion here was 508 per 1,000.

The First District comes next, the ratio to the whole population was 234 to the 1,000.

The second worst ward in this district is the seventh, in which are the Girod st. Cemetery, two extensive hospitals and the gas works. The number of fatal cases in it was 394 per 1,000.

In the second District we have 87 cases per 1,000. Ward No. 2, bounded by Canal, Rampart, and St. Louis streets, and the swamp, having more than double the amount of the average of the district, or 173 per 1,000, embraces in its limits all the cemeteries of the district, (or four squares,) in which were buried that year 1,163 bodies, also the open and half stagnant Claiborne and Canal St. drains, and the filthy conduits in the rear, the receptacle of a large proportion of the foul and corrupting material of the upper part of the city and vicinity, and the influence of the swamps and open drains beyond.

The Third District shows 114 fatal cases to the 1,000."



In speaking of the causes of the mortality in this district, much of it is attributed to the polluting air of a cemetery, in which were buried during the year 2,446 bodies.

Dr. Barton adds :

“There is probably no climate in America where the vicinage of cemeteries would and does do so much damage to public health as here. Rapid and prolonged decay results from the great moisture of the climate, and comparatively small desicative power. Burying almost universally above ground (in the cemeteries of the city,) the brick work soon splits, giving exit to injurious exhalations from the within decompositions. The force of gases (and especially under the augmented temperature of the summer, when they are most injurious,) is often so very great as to burst the leaden coffins, (when made of it), and always to escape through the pores of the wooden ones, and to split the metallic ones, and the brick and plastered work of the vaults, contaminating the atmosphere for a great distance around. In no cases then, if permitted in cities, should a dwelling be permitted nearer to these yards than several hundred paces, according to the frequency of interment. The period in which the body is undergoing decomposition, varies according to the age and size, the season, and the more or less compactness of the tomb. The sextons inform me, that from three to six months is an average period. Let it be longer or shorter, the process is constantly taking place, and any visitor to the graveyards can easily satisfy himself that the confinement of the decomposing bodies is too imperfect for the safety of the community.”

As no doubt there will be opposition to stopping interments in cemeteries or burial places of this city, I call your attention to the following :

Extract from a decree made by the French Government in 1774, as being peculiarly applicable to existing circumstances in this city at the present time :



“ We know, however, that this decree is against the wishes of a certain class, who found their claims upon a possession, in itself an abuse, or upon a permission acquired by means of a small sum, which, they imagine, entails an hereditary right ; as if possession were a right superior to justice, or that a prescriptive indulgence should be continued, in despite of its injury to the public good ; or that a certain sum of money was equivalent for the health and life of their fellow citizens. But these objections are of little moment, and must yield to the considerations of the public weal ; and, no doubt, these very individuals, if they can cast aside their erroneous prejudice and prepossessions, and look only to the advantage of their fellow citizens will join with the majority in applauding this decree.

It is, moreover, an acceptable service in those entrusted with the power of watching over the welfare of their fellow citizens, to extend their solicitude to the preservation of the public health, by using the most efficacious means for removing the cause of disease. This object alone, independent of any other, would have been sufficient to determine this court to institute this decree.”

The entire commission unite in the recommendation that “ The present cemeteries within the city limits should by all means be closed against future use.”

This paper was not published until after my return from the army to Chicago early in 1866,—in the meantime many efforts had been made to suppress the custom, although unsuccessful, at least practically so. Two months after its publication however, the necessary ordinances were passed for the abolition of this custom, providing at the same time for the purchase of lots and removal of the remains, to cemeteries five or six miles out of the city for those who desired it, and the ground that was formerly occupied as a city cemetery, now comprises the greater portion of Lincoln Park,

In this connection it may be proper for me to state that the practical lessons learned in sanitary science in this department by myself as a medical officer of the ar-

my during the war, changed my professional course entirely, and caused me to decide, to apply the experience gained, to Chicago, my home. In January, 1866, I wrote the following note appended to my paper on "Intramural Interments." I see no reason to change the opinions therein expressed, as I am fully satisfied that they apply with peculiar force to the conditions that now obtain in this city, and have given rise to your organization.

"The writer having been on duty at New Orleans, and in the Department of the Gulf, during the late civil war, from December, 1862 to Feb'y, 1864, had ample opportunity to investigate the climate, topography and character of the diseases of that region. He made frequent visits to cemeteries and localities spoken of in the report of Dr. Barton, and is only astonished that attention had not earlier been called to them.

The dead of our army were buried about four miles out of the city. No where in the history of medical science is found a more striking proof of the beneficial results following the strict enforcement of quarantine, and sanitary police. When we consider that there was accumulated in this city and its vicinity a large force, composed of northern men totally unacclimated, therefore more liable, as experience has abundantly proved, to attacks of the diseases incident to the locality, and, from their vocation, more exposed to atmospheric changes and malarious influences, than natives or those who by long residence had lost their susceptibility to these diseases, the improved general health and diminished mortality become still more remarkable. Such results must be accepted as indubitable proof of the soundness and efficacy of the principles of modern hygiene, when enforced by military authority. The yellow fever had, as a general rule, appeared in New Orleans in certain months of the year, and frequently in a severe epidemic form, previous to its blockade and occupancy by the United States forces, and no cases have occurred there since, with the exception of a few



that were brought there on the gun-boats and vessels belonging to the blockading squadron of the Gulf, whose crews were allowed to pass the quarantine station without being detained, when it became necessary that they should refit or obtain supplies. These facts prove that yellow fever is not indigenous to this locality, and that its access may be prevented by the enforcement, by competent authority, of a strict code of quarantine regulations; also, that the observance of a most stringent sanitary police of that city and its vicinity has, and may again ward off the approach of the pestilence, which has for so many years proved fatal to a large proportion of strangers, and at times more than decimated its population: that quarantine regulations may prevent the incursion of diseases foreign to a district, but the internal police regulations and observance of hygienic laws by the residents can alone prevent the ravages of diseases peculiar to any given locality. In cities and districts unoccupied by military, the responsibility falls necessarily upon, and should be met by the civil authority. This enforcement by civil, being less easily accomplished than by military authority, greater stringency in the construction of ordinances should be observed, and these more strictly enforced, under ordinary circumstances would be considered oppressive, both as regards expenditures and police regulations.

In some respects there is a striking similarity in the topography of Chicago and New Orleans, and it is to be hoped that the lesson learned will not be lost upon this city.

In view of the great spread of the epidemic of last year, and the fact that it appeared in localities where it never occurred before, owing mainly to facilities of communications in the valley of the Mississippi; I am satisfied that unless every possible effort in the way of quarantine and sanitation is made, that upon the slightest evidence of the existence of yellow fever in this city, the most rigid quarantine will be enforced against you and quarantine that will not be authorized by the authorities,

but will be undertaken by the people themselves. It is therefore a matter of the utmost importance that you resort to every measure that promises immunity to your city, no matter what local diversity of opinions may exist with regard to the same.

The general impression of the country is that New Orleans has not paid enough attention to Sanitary Science, and therefore is regarded as to some extent responsible for the epidemic of last season. The people of the upper portion of the valley of the Mississippi are deeply interested in what you do for yourselves in this respect, as they also suffer from diseases that become epidemic here.

In 1873, a disease resembling cholera, first commenced here and afterward spread to almost every point in the valley of the Mississippi; and under no circumstances made its appearance on the Atlantic coast or out of the valley; there is therefore, a unity of interest that is inseparable in every portion of the valley of the Mississippi, as epidemics of this character are no respecters of corporate or State limits.

The work that is now being done in this city both by the authorities and your organization, is therefore, an absolute necessity, if New Orleans wishes to maintain its position as a metropolitan city. If this is not done, it will relapse or will simply become a provincial one. In no city in the world is Sanitary Science so intimately associated with the business interests as in this. I do not believe that there is another, for which Sanitary Science can do more if intelligently and persistently applied. The northern portion of the valley can get along much better without you, than you can without them.

One of the most important problems that you will have to deal with, is the Sanitary engineering of your city. It is a matter of the utmost importance that you should shed all the water possible and allow no accumulations under your houses or in lots or grounds adjacent. You want the grounds upon which you live made as dry as possible and your habitations as far removed from it as



practicable. It also important that the grade of your streets should be raised as opportunities occur.

Another important Sanitary measure that needs attention, is the disposition of the night soil. A radical change is necessary.

Man is the disturber of nature, the aggregation of many in a given locality is a violation of the laws of nature, and this violation results in increased mortality and epidemics. It is therefore necessary to resort to artificial means to restore the equilibrium. Sanitary Science does this for large cities, and man makes his own habitation.

From 1842 to 1856, the mean annual death rate of Chicago was 38 per 1000; a greater ratio than that of your own city for the same time; from 1856, when the drainage system of the city was commenced to 1870, the mean annual death rate, was 24-50 and from 1870 to 1878 inclusive, a little over 21 per 1000. In a report to the Chicago Board of Health, written in 1868 by myself. I said: that if the present drainage sanitary regulations were continued in force, that the mean annual death rate could be reduced to 17 per 1000; thus making it one of the healthiest large cities in the world. In 1878 the death rate was 16-50 per 1000, it will however, be higher this year. In glancing over the sanitary history of that city, it was an epidemic of cholera, in 1849 and 1850, that brought about a change in the water supply; later epidemics resulted in the construction of the tunnel under the lake, and the great fire compelled additional improvements, so that by this time the water supply both as to quality and quantity, is probably better than any large city in the world. It was not until Chicago had been visited by six epidemics in succession that the necessity of drainage was forced upon that city and to the result of this your attention has already been called. Another improvement was inaugurated there mainly from a Sanitary standpoint, and that is the Park system which embraces in all nearly 2,500 acres; this did not occur until

1869, and already the influence of tree planting, drainage and improvements of the grounds outside the city limits, is manifesting itself in making the climate there more equable, thus diminishing the death rate by diseases that are influenced by sudden extremes of temperature; we have tried to profit by our experience, will you do it here?

This city may be regarded as the outpost from a Sanitary standpoint for the entire valley of the Mississippi. The signal of danger should be given here, and it will therefore be seen how important concert of action with regard to all matters of this character is to all who live in it; to promote this concert of action, is the object of the meeting about to be held at Memphis which I hope will result in a permanent organization. We of the upper portion of this valley are willing and ready to assist you, provided you are willing to do your share. It is not the object of the meeting at Memphis to isolate your city if it can possibly be avoided, it is however an absolute necessity that all work together for the common good, where the means of communication are so great that independent isolated effort amounts to but little.

In this spirit I come, and I visit your City as the representative of the Illinois State Board of Health. I come here in an official capacity, the object of which is to promote the Sanitary condition of the entire Valley, and as you have already seen I am not unfamiliar with your sanitary wants and necessities. This Association, a movement prompted by the fearful lessons taught by the epidemic of last year, promises well.

You represent the people, you represent the taxpayers—in other words those that are most directly interested in the future of the city. It will be your special duty to educate your community to its sanitary wants by example, and by the expenditure of money; you supplement what from the existing state of things cannot be accomplished by the authorities—it is therefore a matter of vital impor-



tance that there be a concert of action between your association and those in authority. The praises of your Howard Association for their devotion and care of the unfortunate sick have been rung throughout the length and breadth of this land, but the future historian will have a nobler theme to speak of if you carry out the object of your organization, and prevent the necessity of the sacrifices incident to all great epidemics.







